

Google Announces AR Navigation Services



Google has introduced many new features for Google Maps using augmented reality (AR) and computer vision. With regards to AR, it has announced a new navigation service, using the camera and GPS of a smartphone to give the user turn-by-turn walking directions.

Google calls this service Visual Positioning System (VPS), referring to the smartphone camera that is used to “recognise” the surroundings, which is matched with Google’s extensive collection of street view imagery in order to define the user’s location. This service will be useful in combination with a series of Yelp-like applications new to Google Maps that use machine learning to give users recommendations for restaurants and bars based on their own and other people’s Google ratings.

Google also has plans for AR using computer vision to identify real-life objects such as buildings and plants. This feature was previously integrated into Google Photos, but will now be released on a number of Android phones so that it works with a smartphone camera. The service also can recognise and copy printed text to a phone. Finally, Google’s ARCore SDK for developing AR experiences on smartphones, has been expanded for building multiplayer AR experiences that can be shared across different devices.

Competition

Just after Google announced its new VPS, a new competitor of this service announced itself: a tech startup called [Fantasmo](#), who develops tools for creating 3D indoor and outdoor maps, that can be used for navigation by individuals and robots. With a mobile app named Terra Explorer, georeferenced photos are collected and are turned into a 3D point cloud model.